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# **CAPSTONE PROJECT**

# **AGENTIC AI HEALTH SYMPTOM**

# **CHECKER**

**Presented By:**

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Varanasi,Uttar Pradesh-Bachelor's of Science**

# OUTLINE

- **Problem Statement** (Should not include solution)
- **Proposed System/Solution**
- **System Development Approach** (Technology Used)
- **Algorithm & Deployment**
- **Result (Output Image)**
- **Conclusion**
- **Future Scope**
- **References**

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# PROBLEM STATEMENT

An Agentic AI Health Symptom Checker helps users understand their health conditions by analyzing symptoms and providing probable causes, preventive advice, and care recommendations. It retrieves verified medical data, symptom databases, and guidelines from trusted sources like WHO, government health portals, and medical journals. Users can input symptoms in natural language such as “I have a sore throat and fever,” and the agent provides possible conditions, urgency level, home remedies, and when to consult a doctor. It supports multi-language interaction and avoids self-diagnosis risks by offering educational and referral-based suggestions. This AI-driven assistant promotes early detection, reduces misinformation, and empowers users to take informed health actions.

# PROPOSED SOLUTION

The proposed solution is a no-code Agentic AI Health Symptom Checker built using IBM Watsonx.ai Granite LLM, designed to interactively assist users in understanding their health conditions through a structured and intelligent conversation flow. The system allows users to input their symptoms in natural language, such as “I have a sore throat and fever.” In response, the AI agent interprets these inputs and provides:

- Probable medical conditions based on the symptoms.
- Urgency level to help users assess the severity.
- Home remedies and preventive care tips aligned with verified guidelines.
- Suggestions on when to consult a doctor or seek emergency help.

The agent functions by accessing verified medical sources, including WHO guidelines, government health portals, and reliable symptom databases, ensuring that the advice provided is educational, evidence-based, and safe. It avoids direct self-diagnosis and instead offers referral-based recommendations to promote informed health actions.

Furthermore, the solution supports multi-language interactions, making it accessible to users from diverse backgrounds. It fosters early detection, combats health misinformation, and empowers users with trustworthy health insights—all without needing any programming or manual integration.

# SYSTEM APPROACH

- **System Requirements:**

- ⇒ IBM Cloud Lite Account
- ⇒ Watsonx.ai platform access
- ⇒ Foundation Model: Granite-13B-chat-v2
- ⇒ Watsonx Prompt Lab
- ⇒ No local development setup required.

- **Methodology:**

- ⇒ Utilized a no-code approach with Watsonx Prompt Lab for LLM prompt design and interaction.
- ⇒ Prompts were designed to simulate agentic conversation, asking users one question at a time.
- ⇒ Followed a step-by-step health intake pattern to ensure safe and effective responses.
- ⇒ Used verified health information (WHO, CDC, etc.) as a base for language generation within prompts.

- **Libraries/Services Used:**

- ⇒ No external Python libraries used (completely no-code).
- ⇒ IBM Watsonx Foundation Model Inference
- ⇒ Watsonx Prompt Lab interface

# ALGORITHM & DEPLOYMENT

- **Prompt-Driven Logic (Algorithm):**

⇒ The system follows a prompt-based agentic workflow using IBM Granite LLM (13B-chat-v2).

⇒ Each interaction follows a question-by-question format:

- 1 Ask user about current symptoms.
- 2 Ask about onset and symptom progression.
- 3 Inquire about fever, severity, and related conditions.
- 4 Provide a summarized health insight with possible causes, urgency level, and when to seek medical help.
- 5 No traditional ML algorithm is coded — all logic is handled through smart prompt engineering within Watsonx Prompt Lab.

- **Deployment Strategy:**

⇒ Used Watsonx.ai Prompt Lab to design, test, and deploy prompts.

⇒ Deployed the interaction flow using Foundation Model Inference via Granite model on IBM Cloud Lite.

⇒ The deployed agent is hosted entirely on the IBM cloud — accessible without writing or hosting any backend or frontend code.

# RESULT

The screenshot shows a web browser window with the URL `dataplatfom.cloud.ibm.com/projects/new-project?context=wx`. The browser tabs include 'Agentic AI Health Checker', 'Agent Lab (beta) - Docs | IBM', and 'New project | IBM watsonx'. The page title is 'Create a project' with the subtitle 'Start with a new, blank project or select from where to import an existing project.' On the left, a sidebar shows '+ New' with options for 'Local file' and 'Sample'. The main form is titled 'Define details' and contains the following fields:

- Name:** A text input field containing 'Health\_Symptom\_Checker'.
- Description (optional):** A text area containing the text: 'An AI-powered Health Symptom Checker built using IBM Watsonx.ai and Granite-13B-chat-v2 on IBM Cloud Lite with a fully no-code approach. The project enables users to input symptoms in natural language (e.g., "I have a sore throat and fever") and returns probable conditions, urgency level, home remedies, and referral advice. Developed using Watsonx Prompt Lab, the system avoids self-diagnosis by providing educational, structured responses through a deployed Foundation Model Inference endpoint. This'.
- Tags (optional):** A text input field with the placeholder 'Add tags'.
- Storage:** A section for selecting storage, currently empty.

At the bottom right of the form are two buttons: 'Cancel' and 'Create'.

The Windows taskbar at the bottom shows the system clock as 19:01 on 29-07-2025, with the language set to ENG IN.

Agent Lab (beta) — Docs | IBM | watsonx Agent — Health\_Sympt...

dataplatfom.cloud.ibm.com/wx/agents/c35432a9-fa79-41a2-afe5-e053bf0c2a42?project\_id=cacdfd35-90aa-47bc-aeaa-f5f098598897&context=wx

IBM watsonx Upgrade ? Shridhar pandey's Account Dallas SP

Projects / Health\_Symptom\_Checker / watsonx Agent Share feedback Autosaved 6:55 PM New agent + Deploy

### Build

AI Model: granite-3-3-8b-instruct

Setup

Configuration

Framework: LangGraph Architecture: ReAct

Instructions [Advanced configuration](#)

You are a virtual health assistant. You must ask the user their health details one question at a time. Wait for their response before asking the next question. Ask in this order:

1. What symptoms are you experiencing?
2. When did they start?

Knowledge

Vector Index

Disease and Symptoms Dataset


A vector index searches documents for relevant information to ground the model. Upload the files to index or select an existing index.

### Agent preview

watsonx Agent 06:55 PM

Welcome to watsonx Agent

Change this description to reflect your particular agent



Type something...



Agent Lab (beta) — Docs | IBM | watsonx Agent — Health\_Symptom\_Checker

dataplatform.cloud.ibm.com/wx/agents/c35432a9-fa79-41a2-afe5-e053bf0c2a42?project\_id=cacdfd35-90aa-47bc-aeaa-f5f098598897&context=wx

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Projects / Health\_Symptom\_Checker / watsonx Agent Share feedback Autosaved 6:55 PM New agent Deploy

### Build

AI Model: granite-3-3-8b-instruct

time. Wait for their response before asking the next question.  
Ask in this order:  
1. What symptoms are you experiencing?  
2. When did they start?

### Knowledge

Vector Index

Disease and Symptoms Dataset

A vector index searches documents for relevant information to ground the model. Upload the files to index or select an existing index.

### Tools

Add a tool Create custom tool

Added tools (1)

Document search - Disease and Symptoms Dataset


Search documents with vector indexes.

### Agent preview

watsonx Agent 06:55 PM

Welcome to watsonx Agent

Change this description to reflect your particular agent



Type something...

Agent Lab (beta) — Docs | IBM x watsonx Agent — Health\_Symptom\_Checker x +

datapatform.cloud.ibm.com/vx/agents/c35432a9-fa79-41a2-afe5-e053bf0c2a42?project\_id=cacdfd35-90aa-47bc-aeaa-f5f098598897&context=wx

IBM watsonx Upgrade ? Shridhar pandey's Account Dallas SP

Projects / Health\_Symptom\_Checker / watsonx Agent Share feedback 8 Autosaved 7:03 PM New agent + Deploy

### Build

AI Model: granite-3-3-8b-instruct Clear chat

VECTOR INDEX

Disease and Symptoms Dataset

If you want to add a vector index to the agent, clear the agent preview chat.

### Tools

Add a tool Create custom tool

Added tools (3)

- Google search**  
Retrieve information from the Internet with the Google search engine.
- Document search - Disease and Symptoms Dataset**  
Search documents with vector indexes.
- Weather**  
Retrieve the weather of a city.

### Agent preview

SP You: 07:01 PM  
hi

watsonx Agent 07:01 PM  
Hello! I'm here to help you with your health concerns. Could you please tell me what symptoms you're currently experiencing?

► How did I get this answer?

SP You: 07:01 PM  
fever

watsonx Agent 07:01 PM  
I see. How long have you had the fever?

► How did I get this answer?

SP You: 07:01 PM  
3 days

Type something...

Agent Lab (beta) — Docs | IBM watsonx Agent — Health\_Symptoms IBM watsonx Agentic AI Health Checker

dataplatfom.cloud.ibm.com/ml-runtime/spaces/create-space?context=wx

IBM watsonx Upgrade ? Shridhar pandey's Account Dallas SP

## Create a deployment space

Use a space to collect assets in one place to create, run, and manage deployments

Tags (optional)

Find or create tag

Add tags to make assets easier to find

Storage

Cloud Object Storage

Space will include Internet of Things (IoT) data

watsonx.ai Runtime (open)

watsonx.ai Runtime (open)

Advanced Settings

The space is being prepared...

The space "Health\_Symptoms" is being created.

Step 1 of 1. Creating deployment space.

Go to space

Cancel Creating...

28°C Rain Search

ENG IN 19:07 30-07-2025

Agent Lab (beta) — Docs | IBM x watsonx Agent — Health\_Sym x IBM watsonx x Agentic AI Health Checker x +

datapatform.cloud.ibm.com/ml-runtime/spaces/create-space?context=wx

IBM watsonx Upgrade ? Shridhar pandey's Account Dallas SP

## Create a deployment space

Use a space to collect assets in one place to create, run, and manage deployments.

Tags (optional)

Find or create tag

Add tags to make assets easier to find

Storage

Cloud Object Storage

Space will include Internet access

watsonx.ai Runtime (optional)

watsonx.ai Runtime (optional)

Advanced Settings

**The space is ready**

You can go to the deployment space and add assets to it.

✔ Step 1 of 1. Creating deployment space.

Go to space

Cancel

Creation successful

28°C Rain

Search

ENG IN

19:07 30-07-2025

Agent Lab (beta) — Docs | IBM x Health\_Symptoms — Spaces | x Settings | IBM watsonx x Deployments | IBM watsonx x Agentic AI Health Checker x +

← → ↻ dataplatform.cloud.ibm.com/ml-runtime/spaces/5bb0cbec-d3f7-4b8b-a85f-c0fc899962bc/deployments?context=wx





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Deployment spaces /

## Health\_Symptoms

Overview Assets **Deployments** Jobs Manage

🔍 Search

Name	Type	Status	Asset	Asset type	Tags	Last modified	
 watsonx Agent	Online	 Deployed	watsonx Agent	Ai service	wx-agent 	36 seconds ago Shridhar pandey (You)	

Items per page: 20 1-1 of 1 items 1 of 1 pages

Windows taskbar with search bar, system tray, and icons for various applications.

Agent Lab (beta) — Docs | IBM watsonx Agent — Health\_Sym Settings | IBM watsonx Deployments | IBM watsonx Agentic AI Health Checker

dataplatfom.cloud.ibm.com/ml-runtime/deployments/571857d1-29a1-4653-821b-ec99938f8413?space\_id=5bb0cbecc-d3f7-4b8b-a85f-c0fc899962bc&context=wx

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Deployment spaces / Health\_Symptoms / watsonx Agent /

## watsonx Agent Deployed Online

API reference Test Preview

### Endpoints for inferencing <sup>①</sup>

Private endpoint

`https://us-south.ml.cloud.ibm.com/ml/v4/deployments/571857d1-29a1-4653-821b-ec99938f8413/ai_service?version=2021-05-01`

`https://us-south.ml.cloud.ibm.com/ml/v4/deployments/571857d1-29a1-4653-821b-ec99938f8413/ai_service?version=2021-05-01`

Public endpoint

`https://us-south.ml.cloud.ibm.com/ml/v4/deployments/571857d1-29a1-4653-821b-ec99938f8413/ai_service?version=2021-05-01`

`https://us-south.ml.cloud.ibm.com/ml/v4/deployments/571857d1-29a1-4653-821b-ec99938f8413/ai_service?version=2021-05-01`

[Learn more](#) about the 2021-05-01 version query parameter

### Code snippets

API Test Test Context Deployments Code

Bearer <token> <sup>①</sup>

IAM

#### About this deployment

**Name**  
watsonx Agent

**Description**  
Change this description to reflect your particular agent

**Deployment Details**  
Deployment ID: 571857d1-29a1-46...  
Serving name:  
No serving name.  
Software specification:  
runtime-24.1-py3.11 <sup>①</sup>  
Hardware specification:  
Extra extra small: 1 CPU and 2 GB RAM  
Copies:  
1  
Tags  
wx-agent  
Associated asset  
watsonx Agent  
4fdf7e6c-3a59-4dbd-99e1-115591668598



Agent Lab (beta) — Docs | IBM Watsonx Agent — Health\_Symptoms — Settings | IBM Watsonx — Deployments | IBM Watsonx — Agent AI Health Checker

dataplatform.cloud.ibm.com/ml-runtime/deployments/571857d1-29a1-4653-821b-ec99938f8413/chat?space\_id=5bb0cbec-d3f7-4b8b-a85f-c0fc899962bc&context=wx&flush=true

IBM watsonx Upgrade ? Shridhar pandey's Account Dallas SP

Deployment spaces / Health\_Symptoms / watsonx Agent /

# watsonx Agent Deployed Online

API reference Test **Preview**

New chat +

**You 07:49 PM**  
Hi

**watsonx Agent 07:49 PM**  
I'm happy to help you with your health concerns. I'll need to ask you some questions to better understand what you're experiencing. Please answer them one by one.  
  
Here's my first question: What symptoms are you experiencing?

**You 07:49 PM**  
fever

Type something...

## About this deployment

**Name**  
watsonx Agent

**Description**  
Change this description to reflect your particular agent

**Deployment Details**  
Deployment ID: 571857d1-29a1-46...  
Serving name: No serving name.  
Software specification: runtime-24.1-py3.11  
Hardware specification: Extra extra small: 1 CPU and 2 GB RAM  
Copies: 1

**Tags**  
wx-agent

**Associated asset**  
watsonx Agent  
41df7e6c-3a59-4dbd-99e1-115591660598

Agent Lab (beta) — Docs | IBM | watsonx Agent — Health\_Sym... | Settings | IBM watsonx | Deployments | IBM watsonx | Agentic AI Health Checker

dataplatfom.cloud.ibm.com/ml-runtime/deployments/571857d1-29a1-4653-821b-ec99938f8413/chat?space\_id=5bb0cbec-d3f7-4b8b-a85f-c0fc899962bc&context=wx&flush=true

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Deployment spaces / Health\_Symptoms / watsonx Agent

# watsonx Agent Deployed Online

API reference Test **Preview**

New chat +

watsonx Agent 07:49 PM  
Next question: When did your fever start?

You 07:49 PM  
3 days

watsonx Agent 07:49 PM  
Next question: Are your symptoms getting better, worse, or staying the same?

You 07:50 PM  
same

Type something...

## About this deployment

**Name**  
watsonx Agent

**Description**  
Change this description to reflect your particular agent

**Deployment Details**  
Deployment ID: 571857d1-29a1-46...  
Serving name: No serving name.  
Software specification: runtime-24.1-py3.11  
Hardware specification: Extra extra small: 1 CPU and 2 GB RAM  
Copies: 1

**Tags**  
wx-agent

**Associated asset**  
watsonx Agent  
4fd17e6c-3a59-4dbd-99e1-115591668598



Agent Lab (beta) — Docs | IBM | watsonx Agent — Health\_Sym | Settings | IBM watsonx | Deployments | IBM watsonx | Agentic AI Health Checker

datapatform.cloud.ibm.com/ml-runtime/deployments/571857d1-29a1-4653-821b-ec99938f8413/chat?space\_id=5bb0cbec-d3f7-4b8b-a85f-c0fc899962bc&context=wx&flush=true


IBM watsonx Upgrade ? Shridhar pandey's Account Dallas SP


Deployment spaces / Health\_Symptoms / watsonx Agent


### watsonx Agent Deployed Online



API reference Test **Preview**

[New chat +](#)

 watsonx Agent 07:50 PM  
Next question: Do you have a fever? If so, how high is it?

 You 07:50 PM  
103 degree F

 watsonx Agent 07:50 PM  
Next question: Do you have chest pain or trouble breathing?

 You 07:51 PM  
  
Type something...

#### About this deployment

**Name** [watsonx Agent](#)

**Description** [Change this description to reflect your particular agent](#)

**Deployment Details**

Deployment ID: 571857d1-29a1-46...

Serving name: [No serving name.](#)

Software specification: [runtime-24.1-py3.11](#)

Hardware specification: [Extra extra small: 1 CPU and 2 GB RAM](#)

Copies: [1](#)

**Tags** [wx-agent](#)

**Associated asset** [watsonx Agent](#)  
4fdf7e6c-3a59-4dbd-99e1-115591668598

Agent Lab (beta) — Docs | IBM watsonx Agent — Health\_Sym Settings | IBM watsonx Deployments | IBM watsonx Agentic AI Health Checker

datapatform.cloud.ibm.com/ml-runtime/deployments/571857d1-29a1-4653-821b-ec99938f8413/chat?space\_id=5bb0cbec-d3f7-4b8b-a85f-c0fc899962bc&context=wx&flush=true

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Deployment spaces / Health\_Symptoms / watsonx Agent /

# watsonx Agent Deployed Online

API reference Test **Preview**

New chat +

watsonx Agent 07:51 PM  
Next question: Do you have any past health conditions, such as diabetes, heart disease, or asthma?

You 07:51 PM  
Heart disease

watsonx Agent 07:51 PM  
Next question: Have you recently traveled or been in contact with someone who is sick?

You 07:51 PM  
No

Type something...

### About this deployment

**Name**  
watsonx Agent

**Description**  
Change this description to reflect your particular agent

**Deployment Details**  
Deployment ID: 571857d1-29a1-46...  
Serving name: No serving name.  
Software specification: runtime-24.1-py3.11  
Hardware specification: Extra extra small: 1 CPU and 2 GB RAM  
Copies: 1

**Tags**  
wx-agent

**Associated asset**  
watsonx Agent  
4fdf7e6c-3a59-4dbd-99e1-115591668598

19:53 30-07-2025

Agent Lab (beta) — Docs | IBM | watsonx Agent — Health\_Sym... | Settings | IBM watsonx | Deployments | IBM watsonx | Agentic AI Health Checker

dataplatfom.cloud.ibm.com/ml-runtime/deployments/571857d1-29a1-4653-821b-ec99938f8413/chat?space\_id=5bb0cbec-d3f7-4b8b-a85f-c0fc899962bc&context=wx&flush=true

IBM watsonx Upgrade ? Shridhar pandey's Account Dallas SP

Deployment spaces / Health\_Symptoms / watsonx Agent

# watsonx Agent Deployed Online

API reference Test **Preview**

New chat +

watsonx Agent 07:51 PM  
Next question: What is your age group? Are you under 18, between 18-40, between 40-60, or over 60?

You 07:51 PM  
55

watsonx Agent 07:51 PM  
You are between 40-60 years old.

Now, let me summarize what you've told me:

- Symptoms: Fever

Type something...

### About this deployment

**Name**  
watsonx Agent

**Description**  
Change this description to reflect your particular agent

**Deployment Details**  
Deployment ID: 571857d1-29a1-46...  
Serving name:  
No serving name.  
Software specification:  
runtime-24.1-py3.11  
Hardware specification:  
Extra extra small: 1 CPU and 2 GB RAM  
Copies:  
1

**Tags**  
wx-agent

**Associated asset**  
watsonx Agent  
4fd7e6c-3a59-4dbd-99e1-115591668598

3 Search 19:53 30-07-2025

Agent Lab (beta) — Docs | IBM | watsonx Agent — Health\_Symptoms | Settings | IBM watsonx | Deployments | IBM watsonx | Agentic AI Health Checker

dataplatfom.cloud.ibm.com/ml-runtime/deployments/571857d1-29a1-4653-821b-ec99938f8413/chat?space\_id=5bb0cbe0-d3f7-4b8b-a85f-c0fc899962bc&context=wx&flush=true

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Deployment spaces / Health\_Symptoms / watsonx Agent

# watsonx Agent Deployed Online

API reference Test **Preview**

[New chat +](#)

watsonx Agent 07:51 PM

You are between 40-60 years old.

Now, let me summarize what you've told me:

- Symptoms: Fever
- Timeline: Started 3 days ago
- Trend: Symptoms have remained the same
- Fever status: 103 degree F
- Breathing issues: No
- Past health conditions: Heart disease
- Recent travel or contact with a sick person: No
- Age group: 40-60 years old

Here are some general care tips:

Type something...

## About this deployment

**Name**  
watsonx Agent

**Description**  
Change this description to reflect your particular agent

**Deployment Details**  
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4fd17e6c-3a59-4dbd-99e1-115591668598

ENG IN 19:53 30-07-2025



Agent Lab (beta) — Docs | IBMwatsonx Agent — Health\_SymSettings | IBM watsonxDeployments | IBM watsonxAgentic AI Health Checker

datapatform.cloud.ibm.com/ml-runtime/deployments/571857d1-29a1-4653-821b-ec99938f8413/chat?space\_id=5bb0cbec-d3f7-4b8b-a85f-c0fc899962bc&context=wx&flush=true

GmailYouTubeMapsNewsAdobe Acrobat

IBM watsonxUpgradeShridhar pandey's AccountDallasSP

Deployment spaces / Health\_Symptoms / watsonx Agent

watsonx Agent

DeployedOnline

API referenceTestPreview

New chat +

- Age group: 40-60 years old

Here are some general care tips:

1. Stay hydrated by drinking plenty of fluids, such as water, clear broths, or electrolyte-rich beverages like sports drinks.
2. Rest and avoid strenuous activities to help your body recover.
3. Monitor your temperature and symptoms, and seek medical attention if they worsen or if you experience any concerning signs such as difficulty breathing, chest pain, or severe headache.

It's always a good idea to consult with a healthcare professional for personalized advice and treatment. If you're concerned about your symptoms or if they persist, consider scheduling an appointment with your doctor.

► How did I get this answer?

Type something...

About this deployment

Name

watsonx Agent

Description

Change this description to reflect your particular agent

Deployment Details

Deployment ID: 571857d1-29a1-46...

Serving name: No serving name.

Software specification: runtime-24.1-py3.11

Hardware specification: Extra extra small: 1 CPU and 2 GB RAM

Copies: 1

Tags

wx-agent

Associated asset

watsonx Agent

4fd7e6c-3a59-4dbd-99e1-115591668598

19:53

30-07-2025

# CONCLUSION

- The Agentic AI Health Symptom Checker provides an intuitive and responsible approach to preliminary health screening through natural language interactions. By leveraging IBM Watsonx and Granite models, it ensures that users receive informative, accurate, and empathetic guidance while avoiding the risks associated with self-diagnosis. The system enhances public health awareness by offering timely and relevant symptom analysis, helping users make better-informed decisions about their health. This intelligent assistant represents a valuable step toward democratizing healthcare access and empowering individuals with AI-driven insights.

# FUTURE SCOPE

- In the future, the system can be expanded to include integration with electronic health records (EHR) for delivering more personalized advice. Additional enhancements like voice recognition, multi-language support, and smart wearable integration will broaden accessibility and usability. The incorporation of real-time data from government health portals and medical institutions will improve the model's accuracy and reliability. Furthermore, adding a referral mechanism to connect users with verified healthcare professionals or telemedicine services will significantly elevate its practical value in daily healthcare management.

# REFERENCES

- World Health Organization (WHO) – <https://www.who.int>
- Centers for Disease Control and Prevention (CDC) – <https://www.cdc.gov>
- IBM Watsonx & Granite Model Documentation – <https://www.ibm.com/watsonx>
- IBM Cloud Docs – <https://cloud.ibm.com/docs>
- Prompt Engineering for Healthcare Agents, IBM Research Papers
- Health articles from PubMed and Mayo Clinic



# IBM CERTIFICATIONS

In recognition of the commitment to achieve  
professional excellence



shridhar pandey

Has successfully satisfied the requirements for:

Getting Started with Artificial Intelligence



Issued on: Jul 16, 2025  
Issued by: IBM SkillsBuild

Verify: <https://www.credly.com/badges/b8fb3c39-edd7-456a-9d75-77ca835c1182>



# IBM CERTIFICATIONS

In recognition of the commitment to achieve  
professional excellence



shridhar pandey

Has successfully satisfied the requirements for:

Journey to Cloud: Envisioning Your Solution



Issued on: Jul 20, 2025

Issued by: IBM SkillsBuild

Verify: <https://www.credly.com/badges/bce06cc5-7297-4ddc-9e64-dab562f6586d>



# IBM CERTIFICATIONS



This certificate is presented to

Shridhar Pandey

for the completion of

**Lab: Retrieval Augmented Generation with  
LangChain**

(ALM-COURSE\_3824998)

According to the Adobe Learning Manager system of record

**Completion date:** 23 Jul 2025 (GMT)

**Learning hours:** 20 mins

---

# THANK YOU